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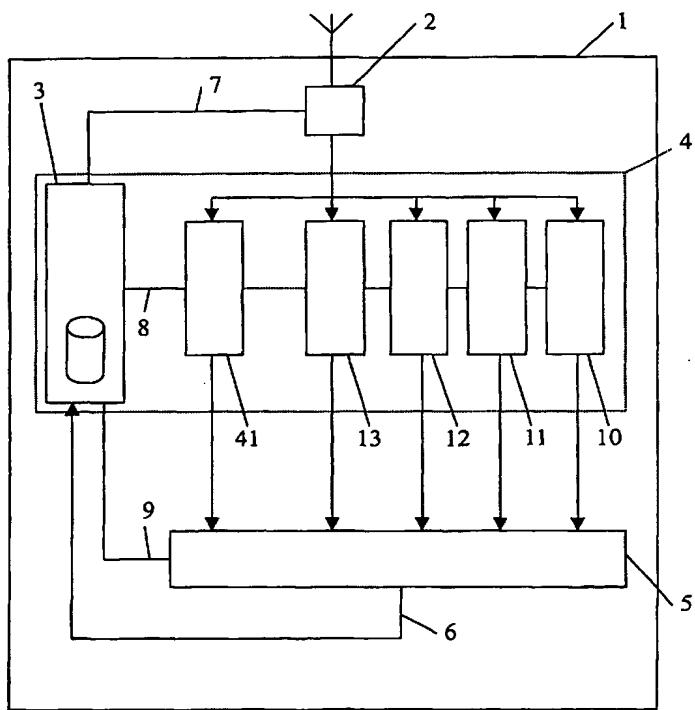
[Continued on next page]

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(75) Inventor/Applicant (for US only): SUN, Yanmeng [CN/NL]; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(54) Title: MOBILE TERMINAL FOR CELL SEARCHING VIA AN ITERATIVE CORRELATION SYSTEM



(57) Abstract: Mobile terminals (1) for searching cells identified by code signals in Time Division - Synchronous Code Division Multiple Access (TD-SCDMA) telecommunication systems comprise correlation systems (4) for correlating input signals with stored code signals. The best correlation result defines the code signal used, which identifies the cell. By providing correlation systems (4) with controllers (3) for controlling correlation systems for performing iterative correlations and adapting correlation parameters per iterative correlation, the computational complexity is reduced much. Said correlation parameter corresponds with the length of code signals, which firstly is to be reduced and then per next iteration is to be increased, and/or with the number of code signals, which per next iteration is to be reduced. Said controllers (3) comprise comparators (5) for comparing correlation results for in dependence of comparison results adapting correlation parameters, and selectors (5) for in response to comparison results selecting a reduced number of code signals to be used for next correlations.

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 654 913 A (NOKIA MOBILE PHONES LTD) 24 May 1995 (1995-05-24) abstract; figures 4-6 column 3, line 30 - line 54 column 5, line 10 - line 46 column 7, line 13 - line 29 ----	1-13
X	EP 1 130 794 A (MATSUSHITA ELECTRIC IND CO LTD) 5 September 2001 (2001-09-05) abstract; figures 1-3 column 1, line 14 - line 56 column 3, line 7 -column 4, line 55 ----	1-13 -/-

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WANG Y-P E ET AL: "Cell search in W-CDMA" IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, IEEE SERVICE CENTER, PISCATAWAY, US, vol. 18, no. 8, August 2000 (2000-08), pages 1470-1482, XP002224578 ISSN: 0733-8716 the whole document -----	1-13

INTERNATIONAL SEARCH REPORT

Information on patent family members

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